Mohit Pinninti

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EDUCATION

Georgia Institute of Technology

M.S. in Electrical & Computer Engineering

Atlanta, GA

Jan 2024 - Dec 2024

Georgia Institute of Technology

B.S. in Computer Engineering, GPA: 3.94 / Major GPA: 4.0

Atlanta, GA

Aug 2020 - Dec 2023

Areas of Interest: AR/VR, Distributed Systems & Software Design, Machine Learning

Courses: Computer Architecture, Machine Learning, Embedded Systems, Malware Reverse Engineering

EXPERIENCE

Qualcomm San Diego, CA

Software Engineering Intern - AR/VR Graphics Architecture

May 2023 - Aug 2023

- Improved visual quality of a mobile rendering pipeline by incorporating a super-resolution algorithm into a VR simulation tool using C++ and OpenGL.
- \circ Improved framerate by 350% on a customer's laser-beam scanning display by designing a GPU simulation to remap an image to take advantage of cache optimizations using OpenGL and C++.

Archer Daniels Midland Company

Erlanger, KY

Software Engineering Intern - Digital Lab

May 2022 - May 2023

- Created an MVP for crop classification at up to 85% accuracy using deep learning to estimate crop yields.
- Analyzed time-series satellite images to detect deforestation at scale using anomaly detection algorithms.
- Created Flask API supporting image retrieval, crop prediction, and storage in Azure Blob Storage and Cosmos DB.
- Presented comprehensive crop yield estimation proposal to VPs, highlighting how advancements in accurate crop pricing increase profit margins for Agricultural Services & Oilseeds business unit.

Georgia Institute of Technology

Atlanta, GA

Research Assistant (Contextual Computing Group - Dr. Thad Starner)

August 2022 - Present

- Developing software applications to allow text captioning on smart glasses to be used for communication by a deaf film crew on the set of an upcoming movie.
- Created and presented demonstrations of key aspects of head-worn displays including weight, focal length, and social acceptability at the International Symposium of Wearable Computing.

Georgia Institute of Technology

Atlanta, GA

Teaching Assistant (ECE 2031 - Digital Design Lab)

January 2022 - Present

- Assisted 30+ students in problem-solving using rapid prototyping of digital circuits using VHDL, FPGAs, breadboard prototyping, and writing assembly.
- Graded student work through digital check-offs of lab work and in-class practical exercises.

PROJECTS

- SociaLite: Built a dynamically loaded social media app using Flutter and Firebase with authentication, profiles, location tracking, social networking, and live feeds.
- **Mbed Fruit Ninja:** Created a fruit ninja spin-off in C++ from scratch using an Mbed microcontroller, uLCD display and accelerometer controls.
- Flock Demo: Built an AR demonstration using Unity3D and ARFoundation where the user can spawn a flock of birds consisting of mothers and babies.

SKILLS SUMMARY

Languages: Java, C, C++, Python, Dart, JavaScript, HTML, CSS, C#, x86, MIPS, VHDL, Verilog Tools: Git, Tensorflow, Pytorch, Flutter, AWS, OpenGL, Firebase, Azure, FPGAs, Unity, Docker

Concepts: Cloud Architecture, GPGPU, Machine Learning, Augmented Reality